The Logger's BARK

1916 - Radio club of Tacoma - 2016

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2017 – A Retrospective

The President's Corner

Dave W7UUU

So, another great year for our W7DK family soon comes to a close. Lots of special memories come to mind for me, beginning with my first hours as the club's new President, sworn in on New Years Eve, also known as Straight Key Night. Museum curator Rich Patrick, KR7W, bestowed the honor on me to have the very first two W7OS Straight Key Night CW QSOs of the event. This time-honored tradition celebrates our long history with Morse Code and the CW mode. Both of my contacts were made from our museum station, on the wonderful old Acme Transmitter (replica of a typical 1930s home made rig) and the newly-restored Hallicrafters SX-28 receiver. What a terrific way to start my term as the new President!

Under the leadership of Adam Barbara W2NCC, the club brought into existence not just one but, *two* time capsules in honor of our Centennial Year, each conceived and fabricated by Adam himself. Since our Centennial began October 2016, there couldn't have been a more fitting time to launch such a project to help carry our future forward to coming generations. Thanks to Adam's hard work (and previous suggestions of a similar project by Larry KD4VOM as far back as 2013), we now have in place both capsules ready to be installed on New Year's Eve. In fact, there's still time left if you want to contribute to either capsule. Just contact Adam or any club officer to find out how to do it.

One of my favorite events of the year was the Bunny Hunt held on May 21st at Fort Nisqually in Point Defiance Park. Thanks to Bob K7MXE, Mike W7MFW, Red WB7EC and Rich KR7W for putting together a truly fun event with a total of 14 "bunny hunters" out in the field. It was my very first bunny hunt in fact, as well as for several other participants. Despite having a bum foot that day, I was still able to locate a few bunny transmitters successfully with the help of Anne N7ANN. The course had been very well thought out to allow for folks needing a little more level terrain. This was one of a number of highlights of my W7DK year and I hope to do it again this coming spring.

And of course, every year in June ARRL Field Day is perhaps the biggest group event of our club's year. This year was no exception. Adam W2NCC volunteered for the very demanding job of managing our Field Day and did an astounding job for us. It's a lot of work putting an event like this together and getting everything up and running smoothly in time for the starting gun. Even with very poor band conditions, almost without regard to band or time of day, we still did very well pulling in a total of 1226 contacts including a few on

160-meters! Turnout was excellent, and the weather was perfect. A great time was had by all who participated.

Our August 20th annual club picnic was another nice event, with a great turnout in Fort Steilacoom Park, right across the street from where field day was held in June. The weather was not so kind this year, bringing chilly temperatures with overcast skies and breezy at times but we all had a really good time. Paul W7PFU and Jan K7HTU as always kept the mess hall running with a nice assortment of goodies off the grill. Phil K7PIA managed to eek out a few QRP CW contacts on his KX2 using David's W7HTJ antenna. And of course, no summer picnic is complete without having to come up with clever ways to lure the bees to some sacrificial food far away from the tables. Lots of nice memories from that day for many of us. The very next morning was the Great Total Solar Eclipse of 2017, viewed by millions around the country.

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Having shared our Centennial Year as President with previous President Gary McAdams WG7X, I have to say it was an honor and a privilege to see our club be ushered into its second century of operation. What an auspicious year it was. Very few radio clubs have managed to not only exist but to thrive for so many years. And even more rare are those such as ours, blessed with having their own clubhouse complete with training spaces, a vibrant library, a museum, and a full kitchen for the many smaller special events we have during our year.

So let's all strive to make 2018 be an even better year for all of us that call The Radio Club of Tacoma their home when it comes to amateur radio. Maybe a few more folks this coming year will trek to the clubhouse on any given Saturday morning from 10 to 2 and share conversations, teach someone a new skill no matter how small, or learn a new one. Have a cup of coffee among friends, and on the last Saturday enjoy a chili dog in the company of fellow radio amateurs. And if you've never been to Straight Key Night, we hope to see you at the clubhouse this coming New Year's Eve from 4 to 9. Pizza will be served, and anyone wishing to bring more goodies, deserts will be most welcome. Have a safe and relaxing holiday season no matter how you celebrate it, and may the new year bring a healthy and happy long life and a fresh new start.

On behalf of the Radio Club of Tacoma, and with the sentiment of Tiny Tim as voiced by Charles Dickens, "A merry Christmas to us all; God bless us, everyone" and a very happy new year to the membership that make our club the wonderful place that it is.

73
Dave
W7UUU

Did You Know?

Participants in the W7OS Museums Straight Key Night celebration DO NOT need to know Morse Code to have fun.

HAMSHACKS OF THE MONTH

BY CONTRIBUTING MEMBERS

This nice collection of Heathkit Equipment belongs to club member Bud K7BUD.

L-R: HL-2200 2KW Linear Amplifier, PS-9000 matching power supply with speaker and clock showing UTC and local time. Above the power supply is HD-1418 audio filter, Very rare SS-9000 transceiver, SA-2060 2KW tuner and HO-5404 Station monitor. The microphone is a highly sought after Heath HDP-242– built for the arrival of the SS-9000.

Two Paragraph Heathkit History Lesson: The SS-9000 100 Watt SSB + CW transceiver was purchased as a fully assembled product. The 9000 began it's life as the SS-8000 which was developed from mid '70s to 1980 when it was due to ship. At the last minute Heath realized that the 8000 kit was way too complicated for the average ham to build and get working. It took Heath 3 years to redesign the 8000 into the fully assembled 9000 which shipped to customers in 1982. The 8000/9000 project cost Heath over 3 million dollars and only sold 2000 radios. In 1982 the SS-9000 sold for $2795 which today equates to $7300. The big fear of SS-9000 owners is that the fluorescent display will quit working – there are no direct replacement parts available.

The HL-2200 Linear Amplifier is the last of the genuine amps build by Heath. A lot of hams thought it was a high cost rip off. In 1984 Heath took it off the market after a year and half. Because of this– it is considered a rare collectors item. The SB-1000 amplifier– made by Ameritron with brown and gray Heath colors– replaced the HL-2200.

Bud's antenna farm consists of a Hygain TH-5 Mk2 Five Element Tri-band Yagi with rotator on a short tower next to his house. A branch dropped off a tree and took out his 40M and 80M Inverted Vees. On the mast above the Yagi is a Comet AB-123 5/8 wavelength vertical for 2 meter comms. K7BUD is often heard on the 147.280 club repeater- take a few minutes and say Hi to him.

From old Heathkit Catalog

AROUND THE CLUBHOUSE
PAST, PRESENT & FUTURE INFO

Dateline…
Sunday, Nov 26, Tower Bowling Lanes, Tacoma, WA…

The Radio Club held its Annual Awards Banquet at this venue. About 45 folks attended and for $20 each received a very tasty brunch. A slide show of the past years events visually played on the party rooms overhead projector and President Dave W7UUU most excellently MC'ed the event. Lots of club volunteers were recognized and presented with a 'wall paper' award certificate and an appreciative round of applause. End of Year Grand Prize Drawing: Red WB7EC won a Kenwood Handy Talky plus GPS combo and Jim W7OWI won an Iambic Morse Code Key.

The Awards Banquet Grand Prize Drawing commencement ceremony.

Dateline… Saturday, Dec 16, RCT Clubhouse…

PJ N7PH presents this blurb: One of the great things that goes on at the clubhouse every Saturday is the informal mentoring of new members/new hams and the curious. This past Saturday, Dec. 16 was a prime example of that spirit. Leslie, K7LCL, a new General class licensee and new ham brought in her new radio, a LNR Precision LD-11 QRP transceiver. LINK: https://www.lnrprecision.com/store/LD-11-p64137743 .

Santa stopped by a bit early at her house. Quite a nice full featured radio. She had not even turned it on yet. Of course the old timers piled on to help her get it set up. Missing needed adapters, cables, and suggestions were supplied and Leslie made her first contact on the noontime net. Congratulations Leslie and a big thanks to those members who got K7LCL on the air.

But Wait! There's more…
From: PJ N7PH the new Bark Newsletter Editor beginning on 1/1/2018.

There's a new sheriff in town! I will try my best to produce a newsletter that informs, entertains, and stimulates the hamagination. I only hope to approach the quality of the newsletter put out by Rich, KR7W every month. A tall order. Thank you Rich for an enjoyable read every month that has kept the members in touch with the club's activities. To that end I would ask that all Radio Club of Tacoma members consider submitting material to the newsletter. If it is of interest to you it will interest other club members. Submit your stories, articles, pictures and ideas as soon as possible but the cutoff date will be the 20th of each month. I hope this will give me enough time to organize, edit, and compose the newsletter. I need your help, guys and gals. This is your newsletter and your submissions give it the direction you want.

Dateline… Nov 29, 2017… RCT Clubhouse, Rohn 65 Tower, 85 ft level…

Your reporter just happened to encounter the Tower Climbing party who were finishing up the final touches on the new Alpha Spid Rotator installation. The Ground Crew consisted of Chuck AC7QN, Bruce WE7P, Alan N7OMS, and the Tower Climber– Adam W7NCC.

Club member Adam W7NCC at the 85 ft level on the W7DK tower.

Dateline… Nov 25, 2017… RCT Clubhouse

Thanks! AD7CC

History Lesson: In the October Bark it was reported that a new attic storage space door was installed in the Museum. The old wall shelf was demolished to make room for the doors swing. About that time the Museum initiated a BOLO (Be on the lookout) for a free/donated piece of 3/4 inch thick plywood to build a new shelf. Club member Ollie AD7CC came through with a donation of one piece of 3/4" and two pieces of 1/4" plywood. More than enough material for the new shelf. **A Barkie *hats off* to Ollie AD7CC**.

The shelf measures 36 in wide and about 90 in high. It is 15 in deep to contain some of the Museums bigger radios to be on display. AC Power and an Antenna connection will be available in the shelf for On The Air demonstrations.

The new shelf was fabricated in the Acme Carpentry shop at KR7W's house and transported to the clubhouse by Chuck AC7QN and his trusty F-150.

Right —>

Final Product Almost complete.

Top Left: Ground crew David W7HTJ, Chuck AC7QN, Mike AD7TH hoist. Rich KR7W on porch roof pulls rope and Randy WB4SPB pulls from window. Jim W7OWI assisted from inside the Museum.

Bottom Left: Club Photographer, Prez Dave W7UUU insisted a photo of the shelf builder, KR7W– be taken.

Club Meeting Traffic

Provided by: Mike W7MWF, Club Secretary

Radio Club of Tacoma
Board of Directors Meeting Minutes
November 1, 2017

Meeting called to order at 1852 PDT by President Dave W7UUU

Officers and Directors Present

President	Dave Ellison W7UUU
Vice President	Mike Mikuchonis W7XTZ
Secretary	Mike Finnie W7MWF
Treasurer	Steve Dightman AF7YD
Board	Phil Pia K7PIA
Board	Red Cranefield WB7EC
Board	Bruce Hanson WE7P
Board	Bob Jamison KE7WPK
Board	Paul Matney W7PFU

Quorum? A quorum was present. 14 members signed the attendance roster which is filed with these minutes.

Silent Key or Illness? None reported

Approval of Minutes The minutes of the October 4, 2017 Board Meeting were approved as coordinated and distributed.

Secretary's Report Mike W7MWF reported receipt of the usual Correspondence; bank statements, utility bills, periodicals. Salmon Run pledge payments are still trickling in. Election Ballots are coming in having so far received 77.

Treasurer's Report Steve AF7YD reported all outstanding bills had been paid and receipts deposited.

Committee / Reports

Membership Mike W7MKE reported that current active membership stands at 306. He also reported that donations for the Salmon Run Pledge Drive have netted $4996.00 with $158.00 still outstanding. A copy of Mike's report is filed with these minutes.

Training Technician Class November 11/12
September 18 thru December 4 - Extra Class license theory course
Next VE Session November 14

Info Tech Randy WB4SPB reported that all systems are functioning within normal parameters. Also, he reported the donation of a Samsung monitor that is being evaluated for integration into the IT complex.

Randy also reported that he had received $275 in donations to help offset the purchase price of a used KX3 being offered for sale by PJ Hicks N7PXY. It was moved and seconded to authorize the expense of $1975 to secure the equipment. The motion passed. The Board also authorized sale of the FT 950 Transceiver currently situated in the Lou Room and to move the Icom 756 Pro III from the HF room to the Lou Room.

HF Operations Updates on rotor replacement were provided by Phil K7PIA. The components are being fitted together and will be ground-tested prior to elevated installation.

Repeater Ops During and following last night's Tuesday Night Net, many users reporting poor audio quality on the 147.280 repeater. Low audio, lots of AC hum, but the "roger beep" is always loud and clear. This will be referred to the Repeater Committee for follow-up. Randy WB4SPB noted that IRLP capability has not been restored and that viability and need for restoration should be evaluated.

Facilities Mgmt Bruce WE7P and Steve AF7YD reported that the sewer line evaluation is nearly complete. Steve also reported difficulty in securing components for the installation of gutters on the garage.

Property Mgmt Bruce WB7EC reported that October sales were $165. He also circulated an updated sales list for the Winter Swap Season. Steve AF7YD noted that he has received invoices for sales tables and info table at Mike and Key 2018 Hamfest and will remit payment.

Museum On behalf of Rich, Randy KR7W reported that there is now a new door into the attic. Also shelving has been removed in the museum in preparation for the installation of new shelves. Rich KR7W is soliciting a 4x8 sheet of ¾ inch cabinet grade plywood for the project. The Eldico restoration continues to be a work in progress with the acquisition of a one-inch oscilloscope tube having been accomplished.

Weds Activity Night Because the November 4th Wednesday falls on Thanksgiving Eve, there will be no activity this month.

Unfinished Business

Annual Awards Banquet Because of a scheduling conflict at the venue, the date of the annual banquet has been changed. It will now be held on Sunday, November 26 from noon until 4:00 p.m. The location is at Tower Lanes, 6323 6th Avenue. The meal will be buffet style with beef and chicken, plus taters, veggies and other toothsome victuals. The price is $20 per person at the door. Serving will begin at 12:30 and the presentation of awards will kick off sometime between 2 and 3 p.m., leaving a bit of time at the conclusion for socializing.

Mike W7MWF will undertake to solicit and tally RSVPs from club members in order to provide a head count prior to the event.

W7DK Century Club The purpose of the Century Club was revisited and subscriptions to date were reported. It was the consensus that we extend subscription window until Dec 31, 2017? Additional publicity and promotion via meeting announcements @ banquet, website and the Bark will be done.

New Business
Purchase of Microsoft Publisher software was discussed and deemed moot since there has been a volunteer who has a copy to fulfill the editorial duties. This will be confirmed by Dave W7UUU and if the software is needed in the future the issue will be revisited.

Request for acquisition of AED Bob K7MXE led the discussion regarding having a defibrillator available for cardiac emergencies. Bob has identified several suitable machines and also several sources that would possibly donate a unit to the club. After discussion, it was moved and seconded to formally support Bob's effort and the motion passed. Bob will continue research and solicitation of purchase or grant options and report back to the Board. Availability of appropriate training for club members will also be evaluated.

General Meeting (W7UUU)
The November General Meeting program, because it's Election Night, will be "Movie and Popcorn Night" - the movie will be a showing of the portion of Ham Nation episode #310 detailing the commemoration of the 70th anniversary of the first electronic Heathkit, which features the W7UUU shack during the K1T Special Event back in July.

Announcements
Reminder that November 8 General Meeting will be at the Library Administration Building starting promptly at 7:30 p.m. All ballots must be submitted to the Secretary before the meeting starts, and then they will be counted.

Adam W2NCC needs artifacts/documents to memorialize in the 25 year and 100 year time capsules. It was determined that the cutoff date for submissions to the time capsules will be December 31, 2017

Adjournment The meeting was adjourned at 2006 PDT.

Submitted by Mike Finnie W7MWF, Club Secretary.

Radio Club of Tacoma
Annual Membership Business Meeting Minutes
November 8, 2017

All Election Ballots turned over to Secretary

Meeting called to order at 1930 PST by President Dave W7UUU at the Pierce County Library Administration Building

Officers and Directors Present

President	Dave Ellison W7UUU
Secretary	Mike Finnie W7MWF
Treasurer	Steve Dightman AF7YD
Board	Red Cranefield WB7EC
Board	Phil Pia K7PIA
Board	Paul Matney W7PFU

Pledge of Allegiance led by Mike W7MKE

Election of Officers and Directors President Dave W7UUU named Ray KE7BZD, Rich N7ANF and Anne N7ANN as the Election Committee. Committee will take possession of the ballots and retire to conduct count.

Welcome and Self-Introductions
Guests None
New Calls None
Self-introductions were conducted. 25 persons were present, and a copy of the sign in sheet is filed with these minutes.

Health and Welfare
Silent Keys and Illness none reported

Secretary's Report (W7MWF) Usual stuff: periodicals, utility bills, bank statements. Some Salmon Run pledge payments and donations. A few membership applications and many ballots

Treasurer's Report (AF7YD) Steve reported all current bills are paid and the payment was made for the K3 transceiver

Committee / Activity Reports

Membership (W7MKE) Membership was report as 307. Renewal forms will be mailed on Monday November 13. The forms were distributed to those members who were present. Mike also reported on the results of Salmon Run Pledge Drive. $4996 has been received so far with a couple yet to be added to the total.

Training Technician Class November 11/12
September 18 thru December 4 - Extra Class license theory course
Dave N7HT requested any technicians interested in a General training to get in touch with him

VE Report The next VE Session will be held November 14, therefor there was no VE report tonight.

HF Operations (K7PIA) The new Rotor and Controller have arrived and is being bench tested prior to elevation to tower.

Repeater Ops We are still having audio problems on the 147.28 repeater, although they seem to be less than last week. The situation will be monitored.

IT Report No reports of anomalous conditions. Everything is working within normal expected parameters. A donated Samsung monitor is being evaluated for possible integration into the IT system.

Museum Museum undergoing remodel with installation of new attic door and removal of old shelving. The Museum Curator is soliciting donation of a sheet of ¾ inch cabinet grade plywood. Forward progress continues to be made on the restoration of the Eldico with the purchase of a suitable oscilloscope tube and the donation by KR7W of old TV transformers to construct a power supply.

Facilities Mgmt Sewer line evaluation is nearly done and no significant defects identified. Root Killer distribution manifold installed. A Garage rehab is nearly complete pending acquisition of suitable gutter components

Prop Mgmt (WB7EC) Sales and donation reports and updates were provided by Red. Sales in October netted $165. The summer sale has ended and the winter sale is on as the PMT ramps up for Mike and Key Hamfest in March

4th Weds Activity Night - No 4WAN this month because it falls on Thanksgiving Eve.

Annual Awards Banquet Because of a scheduling conflict at the venue, the date of the annual banquet has been changed. It will now be held on Sunday, November 26 from noon until 4:00 p.m. The location is at Tower Lanes, 6323 6th Avenue. The meal will be buffet style with beef and chicken, plus taters, veggies and other toothsome victuals. The price is $20 per person at the door. Serving will begin at 12:30 and the presentation of awards will kick off sometime between 2 and 3 p.m., leaving a bit of time at the conclusion for socializing. Mike W7MWF will undertake to solicit and tally RSVPs from club members in order to provide a head count prior to the event. A sign-up sheet was circulated.

New Business

Upgrade of primary HF Radio Phil K7PIA reported that a gently used K3 transceiver was recently purchased from a club member PJ N7PXYand it has been deployed in the HF Room. The ICom Pro III will now be available for use in the Lou Room. The FT950 will be retired from use and made available for appropriate disposition by the PMT.

Unfinished Business and Announcements

Mike W7MWF reviewed the purpose of forming the W7DK Century Club The purpose of the Century Club will be revisited and subscriptions to date will be reported. It was decided by the Board that we extend subscription window until Dec 31, 2017 Additional publicity and promotion via meeting announcements @ banquet, website and the Bark will be done.

Program The November General Meeting program was "Movie and Popcorn Night" - the movie will be a showing of the portion of Ham Nation episode #310 detailing the commemoration of the 70th anniversary of the first electronic Heathkit, which features the W7UUU shack during the K1T Special Event back in July. The snacks were good and the interview of Dave was interesting and informative

Announcement of Election Results

The **Election Committee** returned and reported results.

Mike Mikuchonis W7XTZ reelected to VP for a 2 year term beginning Jan 1, 2018

Mike Finnie W7MWF reelected Secretary for a 2 year term beginning Jan 1, 2018

Paul Matney W7PFU reelected to the Board for a 2 year term beginning Jan 1, 2018

Bruce Hanson WE7P reelected to the Board for a 2 year term beginning Jan 1, 2018

Adam Barbera W2NCC elected to the Board for a 2 year term beginning Jan 1, 2018

Announcements
Mike W7MWF reported club participation in the Boy Scout Hamboree with kudos to Randy WB4SPB and Mike W7XH.

Mike W7MWF reminded folks that Straight Key Night will be held New Year's Eve at the Clubhouse from about 4pm until 9pm.

Adam W2NCC explained to the club his idea for getting bulk-order discounts from MFJ. He will follow-up and let us know if his scheme develops.
Adam W2NCC reminded folks to contribute artifacts for the time capsules, with a date being set to seal them up at year's end 2017.

Show and Tell Bill AD7QI demonstrated several useful and fascinating gadgets, including neon and argon oscillated light fixtures, test equipment, and a 40,000 volt tesla coil that made most folks jump out of their seats when he powered it up.

Tuning and Traffic Dave W7UUU announced that Phil K7PIA has taken over the reins as the QSL manager for W7DK

Door Prize A tool box and tools was won by Al AC7BU

Raffle Prize The raffle prize was won by Dave N7HT

Adjournment All business being concluded, the meeting was adjourned at 2055 PST

2018 Field Day Report
By Field Day Marshal - Adam W2NCC

A technical field day planning meeting will be scheduled in late January or early February.

We will be discussing a redesign of the field day site.

1) Clustering of stations in a central area.

2) Developing a recommendation list of tech items the club could purchase for field day, such as: Feedline chokes for all antennas, new long runs of Coax and Balun's

3) Tuning + testing of the 20m mono band antenna for CW and the other for phone.

4) Review of the current antenna configuration, do we want a loaner steppIR antenna and or 80ft man lift?

If you have a suggestion please feel free to reach out and let me know.

adambarbera@yahoo.com

Ed Note: This article was transcribed from a popular ham radio magazine from 1954 that was found at the Clubhouse Free Table. It's still good info that can be used by hams of today.

Upon moving into our new apartment, I installed a forty meter transmitting antenna by tying end to a telephone pole across the alley and the other end to my Harvey-Wells TBS-50D. It worked fine until an irate neighbor complained to the telephone company about "the dangerous electric wire" over her garage.

Restricted to my own lot, I tried a T2FD, a doublet bent into an inverted V, a folded dipole, and a ¼ wave wire threaded among the power and telephone wires and only proved that I had a good ground, because that's where all my RF went. It certainly never got out of the back yard!

Apparently my only hope was a vertical antenna, but being on the second floor complicated the problem, and I had no room for ground plane radials. I could see no practical solution until one day, I spotted an 18 foot bamboo fishing pole leaning against the front of a sporting goods store. In exchange for $1.18 I obtained the pole and 300 ft of #22 solid copper trolling wire. I departed via the alley, followed by cries of "must be some fish".

Designing the Antenna: Arriving home, I immediately called upon W2USV for aid. He soon arrived with his grid dip meter and several bottles of antenna oil, which is considered very useful in antenna construction.

After abstruse calculations, we decided to wind 130 ft of wire on the pole to start. And instead of evenly spacing the turns, we would use wide spacing at each end of the pole and use close spacing in the center.

With an 18 ft pole about 1 ¼ inches in diameter at the base and tapering to almost 3/16 inches at the tip, the average length of wire in a turn would be approximately 2 inches; therefore, it would require approximately 780 turns for 130 ft of wire. We would wind 260 turns with a spacing of 3/8 inch between turns (8 ft), 260 turns with slightly less than 1/8 inch between turns (2 ft) and use the rest of the wire in turns spaced 3/8 inch on the remaining eight feet of the pole.

Winding the Antenna: The XYL objected to us doing the winding in the house on the ridiculous grounds that we might knock down some of her brik-a-brac, but upon coercion she withdrew her objections. W2USV and I measured off 130 ft of wire from the roll, drilled a couple of very small holes through the pole near each end to anchor the ends of the wire, and began the tedious winding process. Although we were unable to retain uniform spacing between turns at the joints in the pole, our calculations were close enough, because the finished winding occupied the entire pole, with only a few inches to spare.

Bringing the grid dip meter into play revealed that the resonant frequency of the finished winding was 6.6 MC. Soldering a jumper across several of the close spaced center

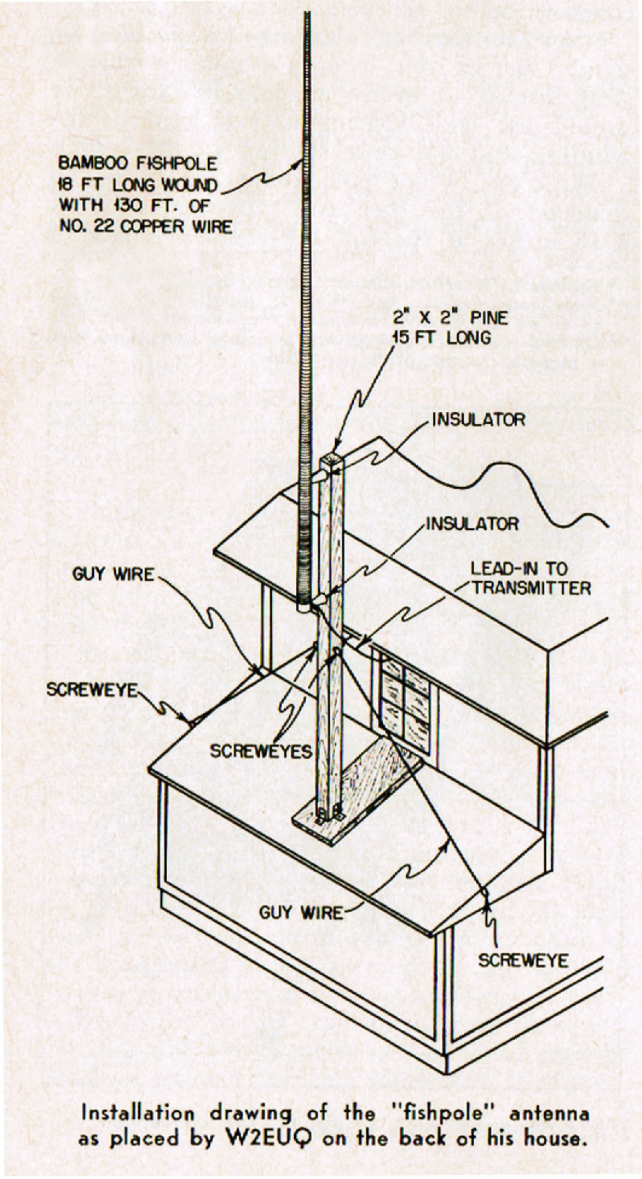
turns moved it to 7.2 MC. Then came the critical test.

We connected the bottom of the winding to the antenna post of the TBS-50D. Wonder of wonders! It tuned and loaded very well over the entire 7MC band. In addition, a neon bulb glowed brightly when touched to either end of the winding and gradually went out as it wsa brought towards the center (of the antenna) indicating that the current and voltage distribution was about what we wanted.

The assembly was then given several coats of spar varnish, allowing each coat to dry thoroughly before the next one was applied.

Mounting the Antenna: The drawing shows clearly how the antenna is installed. I mounted two standoff insulators a short distance apart at one end of a fifteen foot length of 2x2. Then I fastened the bamboo pole to them by means of two metal straps, hoisting the assembly to the roof of the back porch. I rested the bottom of the 2x2 on a piece of scrap lumber and fastened them together with a couple of metal angles.

A piece of guy wire, terminated in eyelets screwed into the 2x2 and the side of the house just below the roof overhang holds the assembly upright against the edge of the roof, and a guy wire to each side of the porch prevents side motion. The 2x2 and the base are both painted white for appearances sake as well as to preserve the wood.



Installation drawing of the "fishpole" antenna as placed by W2EUQ on the back of his house.

By utilizing some of the many fittings available for mounting TV antennas, different mounting arrangements can be devised as required by individual installations.

A single wire drops from the bottom of the antenna and in through the window to the transmitter. This wire becomes part of the antenna. For best results, the number of active turns in the helix should be adjusted with the aid of a grid dip meter after the antenna is mounted and the wire is in place, but before it is connected to the transmitter.

Results: I use the antenna both for transmitting and receiving. Even under crowded band conditions, I worked my share of stations with forty watts input. My poorest report so far has been S6, and my best one was 20dB over S9 at a distance of several hundred miles. The antenna is apparently non-directional and is especially good for working mobiles. It loads well on 14 and 28 MC and I suppose it would work on 3.5 MC, with the addition of a suitable loading coil.

TNT THE NEW THING

WHAT'S NEW AND NOTABLE IN HAM RADIO?

CONTRIBUTIONS BY READERS LIKE YOU

Product Review…. Koss SB-45 Communications Stereophones

Lets time travel to August 2017 when Chuck AC7QN and I were discussing how we were going to operate as an Expedition Station (not a mobile, but a portable station that is set up quickly with a conventional antenna) in the 2017 Salmon Run WA State QSO Party. We planed to operate in 'pull outs' along some busy highways where there'd be car and truck noise. I needed a good headset with a boom mic to not be distracted by road noise and to be able to speak closely into the microphone for SSB QSOs.

Chuck mentioned that he was pleased with a Microsoft Lifechat Gamers Headset with boom mic for less than $30 from Amazon- where he cut the USB sound card dongle off and soldered on 3.5 mm plugs to fit his KX3. In an attempt to out do Chuck in cheapness– I scoured Amazon. A headset for me must fit mi el Gordo Cabeza and totally cover the hearing aids behind my ears… and the mic boom must be long enough to reach my mouth. Amazon suggested: the Koss SB-45 Communications Stereophones. **CLICK HERE** Amazon Link

Communications? What's that about? Reading most of the 600 reviews and 50+ questions… **I took the $24.95 plunge**. Out of the box they felt pretty good on my big head and worked well with my hearing aids whilst watching TV. I tested the microphone fidelity using Audacity sound software– where the mic audio sounded crisp or **Communications** like.

The microphone worked well in my PC but it wouldn't work in the KX3. Turns out that the Koss SB-45 3.5 mm mic plug has the Tip and Ring conductors on the plug shorted out. On the KX3– the Ring lead is Push to Talk. Cutting the stock mic plug off and soldering a new 3.5 mm T-R-S plug solved this problem– and it still works in my PC.

This boom mic headset worked extremely well for my Salmon Run radio operating.

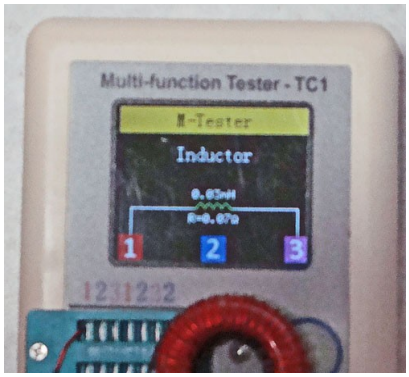
The Koss SB-45 will work well with radios that use 3.5 T-R-S mic jack and Phone jack– like KX2, KX3, maybe LD-11 if the radio has a TRANS/PTT button on front panel.

Product Review… The Multi-Function Tester

By Adam W2NCC

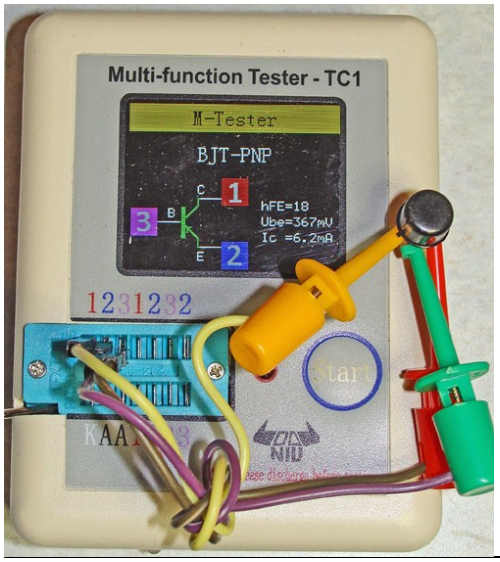
Recently I purchased a cheap Multi-function tester. These cheap offshore made testers can be found at the big online stores for 25-30 dollars. The unit comes with a USB charger, 3 test leads and a few electronic components (Cap and LED) for testing. There are a few different versions of this product being sold. I compared my purchase with WE7P Bruce's unit. Both units are running the same version of firmware 2.12. The biggest difference seems to be in the packaging design. The tester does not come with a manual or directions. That's to be expected when buying a 26 dollar product with free shipping.

This device could be called an intelligent semiconductor analyzer. This means the device under test (capacitor or transistor) can be connected to the tester in any order. The TC1 tester has the ability to detect NPN, PNP, N- and P-channel MOSFET, JFET and diodes. Also, it will detect and measure capacitors, inductors and resistors. The device is fitted

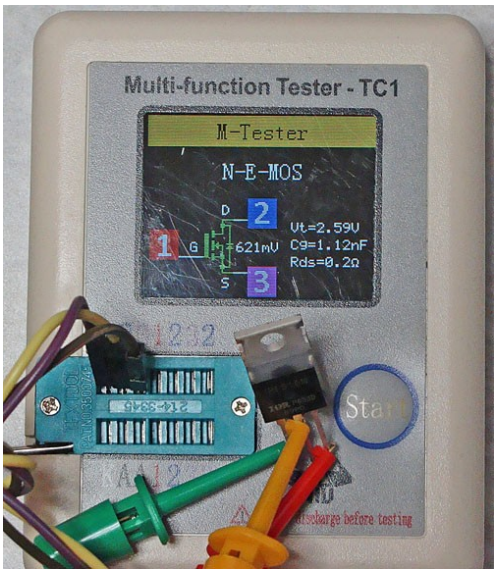


with a test bed (ZIF socket). All of the slots are numbers so when testing a component the leads must be placed in different numbered slots. The tester has automated detection of pin assignment so a resistor can be put in any 2 different numbered slots or a FET could be tested using any 3 different numbered slots. Hmmm, really, let's test this thing.

I grabbed a resistor and put it in. The tester read it as 327.4 ohms and the resistor was a 330 ohms 10 % tolerance. Next I tested a few capacitors both ceramic disc and electrolytic all worked as well. The tester even provided ESR (equivalent series resistance) values. There is a LCD display that shows a graphic picture of the device under test. Resistors and capacitors are displayed with their respective symbol, pin number and value. This device can test Zener diodes. There is a special area lower left part of the test bed for Zener diode testing.



Before using the 3 short test probes a self-test was performed. Insert the short probes in to the test bed and then short all three probes. Next press the "Start" button, the tester will begin an automatic calibration. During the calibration process you will be prompted to disconnect (isolate) the shorted probes. The unit will finish calibrating and prompt you when completed.



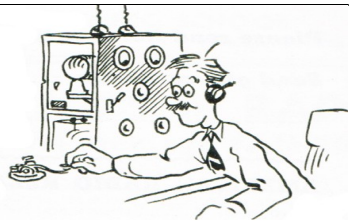
Now for the big reveal, the transistor test. Under the bench was a box I recently unpacked. It has not seen daylight in 20 years. I pulled out an old 2N1195 and in to the tester it went. Wow, sure enough it worked. The tester showed the schematic symbol for a PNP transistor with Collector, Emitter and Base connected to Pins 1, 2, and 3 respectively. Moving the pins around and re-testing worked as well. Also, the tester showed a forward voltage as 367 mV. The 2N1195 is a germanium type of transistor so 367 mV is about right for this type of device.

Interesting this device has an IR decoder too. The tester will display the user code, data code and the corresponding infrared waveform.

This is not bad for a 26 dollar product with free shipping so I give it a thumb's up. The graphic display is nice showing pin number and corresponding base, emitter collector of a transistor. The build in intelligent analyzer make testing components fast and painless. However, there seem to be fluctuations in values as the battery voltage dropped. This is not a precision instrument for EE design but for around the shack its worth having.

Details Here: http://w7dk.org/images/rct_bark/bark_2017_11.pdf **Go to Page 6**

60 Years Ago In Ham Radio



The Globe Champion 300A - by Rich KR7W

This AM or CW transmitter was built in Cedar Rapids, IA around 1956 by the World Radio Labs, aka WRL. The Globe Champion is capable of 300-350 watts input power (back then– hams measured their power as **input** vs output of today). This equates to about 200 watts output on a good day into a tuned antenna. This 300A is a big boy radio transmitter with 17 vacuum tubes, heavy iron 350 and 1050 volt power supplies and weighs in at about 120 pounds.

Front panel and knobs cleaned up pretty nice using automotive polishing compound.

The rusty side of 300A sat on the floor where water collected. Naval Jelly dissolved the rust.

This particular Globe Champion was a donation to the club and the PMT folks stored it on the floor in the garage next to the man door. I suspect this became the Champ's home because he was too big and heavy to move to a better spot. Over time rain worked its way under the door and the radio transmitter sadly began to rust.

The Globe Champion –the ugly puppy in the pet store- wasn't selling like the Property Management folks had hoped. My low cash offer was accepted. Once home- plywood boards were temporarily bolted on the sides of the chassis so it can be turned upside down without crushing tubes and coils. The chassis was cleaned with Naval Jelly rust remover and brought into my basement electronics shop. The rusty cabinet was sanded, primered and painted gray to look like a Collins S-Line radio.

Lately– the Champ receives a lot of my attention to get it to transmit on 15 and 20 Meters. Hopefully soon it'll repaired and work well enough to jam the ether at this years W7OS Straight Key Night. I'm gonna need some help to carry the big boy up the clubhouse stairs to the Museum. Listen for the Champ's big signal on 7.045 MCs on New Years Eve.

The pretty blue glowing tubes are the 1050 volt power supply mercury vapor rectifier tubes.

This is my last RCT Newsletter effort. It's been a fun and a sometimes challenging 24 months of soliciting ham radio content to inform and entertain club members and non members alike. I do look forward to contributing technical and eclectic articles to future issues of the Bark.

Beginning Jan 1, 2018– the new Bark Editor is PJ Hicks N7PH. PJ attends every club meeting and is at the club house on Saturdays. Please take a moment to speak to PJ and let him know what content you'd like in your clubs newsletter.

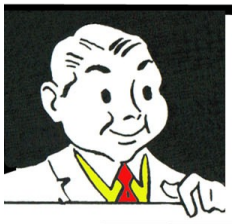
Yet, Another Hiking and Radio Story:
On July 21, 2017… Club members Ms Pat WT7N, Liz W6RHY, and myself went for a walk in the woods to Norse Peak. This hike was training for Ms Pat and myself to prepare for a two week backpacking trip in August. Since Norse Peak is a Summits On The Air Peak I added radios, battery, and antenna for dead weight instead of the usual gravel in my pack.

Pre-Fire Foliage on summit

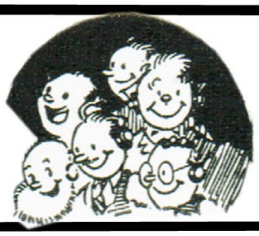
The hike to **Norse Peak** begins a few miles up the Crystal Mountain Ski Resort road from Highway 410. The 5 mile hike gains about 3,000 ft. This hike is not too scenic until the sub-alpine trees and foliage are encountered above 5,700 ft and onward to the 6,800 ft summit. It is hard to miss the Ski Area village in the valley below. The best scenery is looking east from the summit and north along the Pacific Crest Trail. This Norse Peak is the namesake for the 55,000+ acre Forest Fire that began on **August 11** that nearly burned down the Ski Resort.

After catching our breaths… I set up the SOTA radio equipment consisting of: Elecraft KX3, 11 volt LiPoly hobby battery, 44 ft Doublet antenna. Also a Kenwood D72 APRS handy talkie. I'm not very comfortable operating the **Phone Mode** – but on a SOTA summit I've been told I turn into someone else and seem to enjoy making 2 Meter contacts on 146.52 I am always amazed that so many hams listen to dot 52 in their car or

R: The Ski Resort is down in the valley SW of Norse Peak.

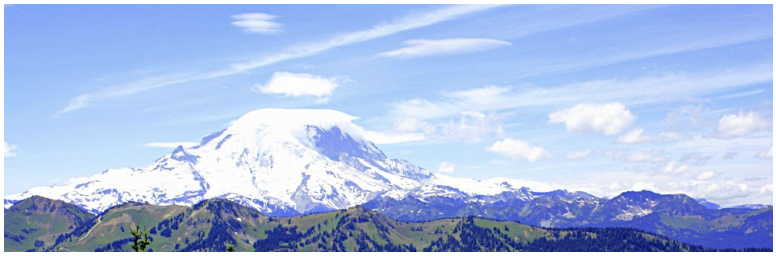


The Logger's Bark Photo Page



shack. My Log Notes indicate that 8- 2M QSOs were made – the furthest was a brand new ham in Anacourtes, WA. Another notable QSO was with our club's Randy WB4SBP using his Baeofeng and vertical dipole. Nine HF QSOs were on 20 meters using CW. One QSO was with another SOTA operator on Colquhoun Peak, east of Greenwater. The furthest HF contact was in TX.

Below: Summit House and Grubstake Peak in foreground.
R: Old Fire Lookout debris remains on Norse's summit.



Liz, W6RHY seems to be having fun after all that hiking. Rich operates KX3. Antenna mast is lashed to old snag tree and TV twin lead feed line hangs down. Photos by Ms Pat WT7N.

RADIO CLUB OF TACOMA

1916 - 2016

100 YEARS OF SERVICE

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CLUB OFFICERS

President: Dave Ellison, W7UUU - w7uuu@w7dk.org
Vice Pres: Mike Mikuchonis, W7XTZ - w7xtz@w7dk.org
Secretary: Mike Finnie, W7MWF - w7mwf@w7dk.org
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5 BOARD MEMBERS

Bruce Hanson, WE7P - we7p@w7dk.org
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Bob Jamison, KE7WPK - adambarbera@yahoo.com
Red Cranefield, WB7EC - wb7ec@w7dk.org
Phil Pia, K7PIA - k7pia@w7dk.org

LOGGER'S BARK STAFF

Editor: Rich Patrick KR7W
Contributors: The members of the Radio Club of Tacoma
Send articles to: 599kr7w@gmail.com Bark, PO Box 11188, Tacoma, WA 98111

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RADIO CLUB REPEATERS

Central Tacoma:	147.280 + PL=103.5	
Crawford Mountain	147.380 + PL=103.5	(E of Olympia @ 1500 ft ASL)
Central Tacoma:	440.625 + PL=103.5	
North Tacoma:	145.21 – PL=141.3	

www.w7dk.org [LINK] - For the latest and most current information on events and activities, visit the Radio Club of Tacoma Website.